



Heat wave impact on morbidity and mortality in the elderly population: A review of recent studies

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Abstract:

BACKGROUND: The on-going climate change is predicted to yield a growing number of extreme climate events which will increase in both intensity and frequency. Increased longevity is changing society's demographics. It is very likely this will have a direct impact on population health. Many studies have previously shown that the elderly in a society are among the most vulnerable to heat waves. **OBJECTIVES:** With a rapidly growing number of publications on this subject the objective was to review the recent literature for research regarding the impact of heat waves and elevated temperature on the elderly with regards to mortality and morbidity. **METHODS:** PubMed was searched to identify studies published in English between 1st of January 2008 and 31st of December 2010 using the following key words: heat wave, mortality, morbidity, elderly and temperature. The relationship between high temperature and mortality and/or morbidity had to be studied. Results for the elderly had to be provided. **RESULTS:** Six studies of temperature-morbidity-relationship were found and 24 studies of temperature-mortality-relationship. Studies consistently reported increases in cardiovascular and respiratory mortality, as appeared also respiratory admissions to do during hot days and heat waves. However, the number of studies on morbidity published was much fewer. Few studies reported social, medical and environmental susceptibility factors. **CONCLUSIONS:** Future research should focus on studying susceptibilities and to non-fatal events which are not as studied as mortality. Studies on the modification of type of urban environment, housing and mortality and morbidity in the elderly population are also needed.

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Resource Description

Exposure : ☒

weather or climate related pathway by which climate change affects health

Temperature

Temperature: Extreme Heat

Geographic Feature: ☒

resource focuses on specific type of geography

None or Unspecified

Geographic Location: ☒

Climate Change and Human Health Literature Portal



resource focuses on specific location

Non-United States, United States

Non-United States: Asia, Australasia, Europe, Central/South America, Non-U.S. North America

Asian Region/Country: China, Other Asian Country

Other Asian Country: Russia; Bangladesh

European Region/Country: European Country

Other European Country : United Kingdom; Italy; Sweden; Spain; Portugal; France; Hungary

Health Impact:

specification of health effect or disease related to climate change exposure

Cardiovascular Effect, Mental Health/Stress, Morbidity/Mortality, Respiratory Effect, Urologic Effect

Cardiovascular Effect: Heart Attack, Other Cardiovascular Effect

Cardiovascular Disease (other): cardiovascular mortality

Mental Health Effect/Stress: Other Mental Disorder

Respiratory Effect: Other Respiratory Effect

Respiratory Condition (other) : respiratory mortality

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Elderly, Low Socioeconomic Status

Resource Type:

format or standard characteristic of resource

Review

Timescale:

time period studied

Time Scale Unspecified